ABSTRACT OF THE DISCLOSURE

This invention provides a method allowing communications to pass between private network segments without the need for holes in the firewalls of those networks. The method uses an Intermediary machine located somewhere on a public network as described herein. A component in the private service network opens one or more outbound connections to the Intermediary and leaves these connections open waiting for a response. These outbound connections pass transparently through any restrictive firewalls on the private service network as they these firewalls are typically set-up to block only unprompted inbound requests. A component on the client private network then connects to the same Intermediary with an outbound connection and sends it a request that should be serviced by a server located on the otherwise inaccessible private service network. The Intermediary passes this client request on to the private service network as a response to the waiting outbound connection previously opened by the service network component to the Intermediary. The client request thus enters the private service network a response to a previously opened outbound connection from the service component and so is not blocked by the private service networks firewall. The service component reformats the request and transmits it on to the service machine in the private network as required. The invention as presented has advantages over previous inter-network communication methods including, most notably, that no changes are required to either: the service or client software or to private network and firewall settings, and that security and compression can be transparently added to network communications. The invention as presented also provides a new method for transparent service clustering and load balancing.